19-AA-0820

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 91-122

WASTE DISCHARGE REQUIREMENTS
for
CITY OF LOS ANGELES
(LOPEZ CANYON LANDFILL)
(File No. 69-68)

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. The City of Los Angeles owns and operates the Lopez Canyon Landfill, a 399-acre, Class III waste disposal facility located at 11950 Lopez Canyon Road, Lakeview Terrace District, Los Angeles, California, within the City of Los Angeles and bordered by unincorporated Los Angeles County, under this Board's Resolution No. 70-05, adopted January 14, 1970.

2. The City of Los Angeles (hereinafter Discharger) has filed a Report of Waste Discharge (ROWD) and supplemental information for the disposal of wastes to land of nonhazardous and inert solid wastes with this Regional Board for expansion and continued operation of the Lopez Canyon Landfill in accordance with Section 13260, California Water Code (CWC), and Article 9 of Chapter 15, Division 3, Title 23, California Code of Regulations, "Discharges of Wastes to Land", (hereinafter Chapter 15).

3. The Lopez Canyon Landfill is located adjacent to the San Fernando Hydrologic Subunit of the Los Angeles - San Gabriel River Hydrologic Unit (Los Angeles River Basin). Surface runoff exiting the landfill eventually enters the surface waters and underlying water bearing strata of this Subunit. Evidence indicates the site area's sparsely occurring ground water does not reach, or does not contribute an appreciable quantity to this Subunit. The existing and/or future beneficial uses of the San Fernando Subunit are municipal, domestic, and agricultural supply, industrial service and process supply, groundwater recharge, water contact and non-contact recreations, and wildlife habitats.

4. Conditional Use Permit (CUP) City Plan Case No. 90-0271 CU was approved by the City Planning Commission on September 27, 1990 and prohibits the disposal of sewage sludge and/or any of its constituents.

5. A variety of land uses exist within one mile of the landfill. Lakeview Terrace residential community is immediately to the south, with some residences within 300 feet of the site. Kagel Canyon residential community is to the east, with some residences within 1,000 feet of the site. Blue Star Mobile Home Park is immediately to the west, with some residences within 300 feet of the site. Light manufacturing, commercial, and agricultural uses are west along Lopez Canyon Road. Sparsely developed foothill areas border the north and northeastern site boundaries. The Foothill Freeway is approximately one mile south and southwest.

6. The landfill is, and will be operated as, a modified "cut and cover" side hill landfill. Soil for use as cover is excavated within the site property, or provided by reclaiming clean dirt loads from the incoming waste stream. Cover is designed and constructed to minimize infiltration of precipitation. Refuse is spread and compacted in lifts to form cells which are approximately 20 to 25 feet in height. On the face of the landfill, soil is placed at a minimum thickness of 7 feet perpendicular to the front face (15 feet on the horizontal). In addition, a bench, approximately 15-feet wide, is constructed every 50 feet vertically to provide for improved slope stability, drainage, and access for maintenance. This design provides for proper grading and drainage of surface water to eliminate ponding of such water over the waste. The supplemental information includes the installation of a cutoff wall and system drains between existing fill Area AB+ and proposed fill Area(s) C. The wall has a minimum thickness of one foot, a permeability below 1×10^{-6} cm/sec, and is keyed in at least five feet into the bedrock. The discharger submitted a report, "Results of Hydraulic Conductivity Testing, Seepage Cutoff Barrier and Disposal Area AB+" in order to fully satisfy the Chapter 15 requirements for this alternative to the construction of a liner on "virgin" ground areas within the existing waste management area, AB+. This report demonstrates that the underlying bedrock in area AB+ provides adequate ground water quality protection from the disposal of nonhazardous solid wastes. Any leachate collected from this area will be conveyed to the mouth of Canyon C and disposed of as required. The final design and construction methods for proposed engineered systems will be reviewed and approved by the Executive Officer prior to installation and use.

7. The City of Los Angeles has installed a landfill gas recovery system (LGRS) at the landfill. This system will be expanded to include the new area. Landfill gas is collected under vacuum through a system of vertical extraction wells and horizontal trenches. The recovered landfill gas is burned at an onsite flare station and/or an onsite gas-to-energy facility.

8. The City of Los Angeles has proposed drainage improvements at the landfill to better protect nearby residential areas. For runoff from Areas A and B, the City has proposed additional debris basins, benchdrains, downdrains, and energy dissipators to remove the debris and reduce the flow rate. Storm water runoff from Areas A and B flows to a debris basin equipped with an outlet standpipe and an overflow structure, both of which direct the discharge into the Hansen Dam Flood Control Basin. Runoff from Areas AB+, and construction Area(s) C flows to debris basins and into the Whitehorse catch basin which directs the flow into the Lopez Canyon Flood Control Channel. The additional improvements the City has proposed for this area include raising the channel walls in the proximity of additional basins and installing drains in the basins to direct the runoff into the Lopez Canyon Flood Control Channel. From this channel, the runoff will flow to the Hansen Dam Flood Control Channel. All drains will be sized to handle runoff from the 100-year storm.

9. There is no known ground water table under the site since only ephemeral ground water has been encountered.

10. The site is not within a 100-year flood plain or in a designated flood prone area.

11. Active traces of the San Fernando Fault Zone which moved in 1971 are present in the nearby area. Active faults are defined as Holocene Epoch faults, meaning that they have shown surface movement in the last 11,000 years. The more significant segments are the Tujunga Fault, the Kagel Fault, and the Oak Hill Fault. The Tujunga Fault crosses the southwest corner of the property just north of the landfill entrance. The Kagel Fault crosses the southeast corner of the site. The known portion of the Oak Hill Fault is 150 feet northwest of the property. Recurrence intervals indicate this fault should be dormant for several hundred years. Recent excavation in the area of the proposed water tank revealed a few segments of faults up to 65 million years of age (Tertiary) in sediments with uncertain activity. Recent trenching in proposed

fill Area(s) C, revealed several segments of inactive faults (no active or potentially active faults were revealed). Potentially active faults are those which have been active within the past 11,000 to 3 million years and inactive faults are those which have not been active for over 3 million years. Only the above named active faults showed activity in the 1971 earthquake. No traces of active faults are known to cross the expansion areas.

12. A seismic analysis conducted for this facility indicates that a magnitude 6.75 earthquake is the maximum probable earthquake that is statistically likely to occur within 100 kilometers and within 100 years. The nearest fault capable of generating this magnitude earthquake is the San Gabriel Fault, which, at its nearest point, is four miles from the site. Peak horizontal acceleration from the maximum probable earthquake is approximately 0.5g. The maximum credible earthquake on the San Fernando Fault is estimated to be 6.5.

13. The landfill site is underlain by the Tertiary Modelo, Tertiary Towsley and Pico, and the Tertiary-Quaternary Saugus Formations. The Modelo Formation consists of two types of materials: a predominantly sandstone unit, and a predominantly shale unit. The sandstone unit contains some interbedded shale and siltstone, and the shale unit varies from silty shale to sandstone. The Towsley and Pico Formations are made-up of three units: a sandstone/conglomerate unit, a shale/siltstone unit, and a conglomerate unit. The Saugus Formation consists of loosely consolidated conglomerate and course sandstone. Where exposed, bedding is indistinct or absent. The relatively scarce alluvium is locally derived and is present only in drainage channels and canyon bottoms. The bedrock structure, where observed, trends west or slightly north of west, and dips to the north between 20 to 70 degrees.

14. The Bureau of Sanitation of the City of Los Angeles prepared a Subsequent Environmental Impact Report (SEIR), a Final SEIR, and an addendum to the Final SEIR. Since none of the issues significantly changes the information presented in the Final SEIR an addendum was prepared for this project. In addition, all other issues, including Water Quality, Earth/Landforms, Air Quality, Noise Level, Land Use, Transportation and Circulation, Human Health, Views/Aesthetics, and Light and Shadows are unaffected by the consideration of the environmental topics of the addendum. While revisions have been made to the shade and shadow and seismicity analyses presented in the Final SEIR, the revisions do not change the determination of no significant impacts in the Final SEIR. Therefore, the addendum presents technical changes to the information presented in the existing environmental documents. The SEIR for Lopez Canyon Landfill was certified by the City Council on January 30, 1991. The EIR determined that the disposal of waste within the Lopez Canyon Landfill could be done in such a manner as to have no adverse effect on water quality.

15. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on June 3, 1991. The Plan contains water quality objectives for surface and ground waters of the San Fernando Hydrologic Subunit of the Los Angeles River Basin. The requirements in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

The Board has notified the discharger and interested agencies and persons of its intent to revise waste discharge requirements for this discharge pursuant to Section 13263 CWC, and has provided them with an opportunity to submit their written views and recommendations.

The Board, in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that the City of Los Angeles, shall comply with the following at the Lopez Canyon Landfill:

A. Acceptable Materials

1. The Lopez Canyon Landfill is a Class III landfill.

2. Wastes disposed of at this site shall be limited to certain nonhazardous solid and inert wastes.

a. Nonhazardous solid waste means all putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid or semi-solid waste; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated waste) (Section 2523(a), Chapter 15).

b. Inert wastes are earth, rock, gravel and concrete; glass; bricks; broken asphalt; vehicle tires and rubber scrap.

B. Unacceptable Materials

1. No hazardous, designated, or special wastes such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids such as salts, borax, lye, caustic or acids shall be disposed of at this site.

2. No semi-solid waste shall be disposed of at this site except as noted above. Semi-solid waste means waste containing less than 50 percent solids, as described in Section 2520(d)(3), Chapter 15.

3. No materials which are of a toxic nature, such as insecticides, poisons, or radioactive materials, shall be disposed of at this site.

4. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal, and human disease, shall be disposed of at this site.

5. No pesticide containers shall be disposed of at this site unless they are rendered nonhazardous by triple rinsing.

6. No septic tank pumpage or chemical toilet wastes shall be disposed of at this site.

7. The discharge of wastes or waste byproducts (leachate or gas condensate, for example) to natural surface drainage courses or to ground water is prohibited.

C. Water Quality Protection Standards

1. In accordance with Section 2550.2 of Chapter 15, the following water quality protection standards are established for this facility:

Parameter	Units	Maximum Value	
		Alluvium	Bedrock
Total dissolved solids	mg/l	1400	400
Sulfate	mg/l	680	100
Chloride	mg/l	110	50
Boron	mg/l	.23	1

2. If any waste constituents are not considered to occur naturally, the absolute background concentrations for these constituents shall be zero. The ambient background value for a constituent may be established to be greater than zero if this constituent is present upgradient.

3. If a concentration of a waste constituent is statistically significantly above background concentrations, one of the following will apply:

(a) If this concentration is above background concentrations, but below the maximum water quality protection standard, the site will be reported to be leaking that waste constituent.

(b) If this concentration is above the maximum water quality protection standard, the site will be reported to be leaking a prohibited level of that waste constituent.

(c) If this concentration is above an attenuated waste concentration derived from the corresponding level listed in Article 11, Chapter 30, Title 22, of the California Code of Regulations, the site will be reported to be leaking hazardous waste.

4. Water quality protection standards may be modified by the Board based on more recent or complete monitoring data, changes in background water quality, or for any other valid reason.

5. The compliance point(s) where the water quality protection standards shall apply shall be the downgradient edges of the waste management units.

6. The compliance period for which the water quality protection standards are applicable shall be the entire active life of the site and during the closure and post-closure maintenance periods.

7. The discharger shall use the statistical procedures contained in Chapter 15, Section 2550(e)(7) to determine if there is a statistically significant spatial increase for any indicator parameter or waste constituent. Upon approval of the Executive Officer, alternative statistical procedures may be used.

8. In the event a statistically significant spatial increase is observed for any indicator parameter or waste constituent, the discharger shall establish an evaluation program in accordance with Section 2550.9 of Chapter 15.

9. In the event the evaluation monitoring program reveals a statistically significant spatial increase for any indicator parameter or waste constituent, the discharger shall establish a corrective action monitoring program in accordance with Section 2550.10 of Chapter 15.

D. Requirements for Disposal Site Operation

1. All State, County and City sanitary health codes, rules, regulations and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this site.

2. There shall be no damage or nuisance to the community by odors or unsightliness, which result from the disposal of wastes at this site, as defined in Section 13050(m) of the CWC.

3. A detailed description of the periodic waste load checking program shall be submitted for Executive Officer approval within 90 days of adoption of this Order. Any proposed changes in this program shall be submitted for Executive Officer approval. The approved program shall be continued (or implemented) to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials.

4. Neither the disposal nor handling of wastes at this site shall create pollution as defined in Section 13050(l) of the CWC.

5. The discharger shall comply with notification procedures contained in Section 13271 of the CWC in regards to the discharge of hazardous substances. The discharger shall remove and relocate to a legal point of disposal, in accordance with County Health guidelines, any safely recoverable wastes which are discharged at this site in violation of these requirements. The Board shall be informed monthly, in writing, whenever relocation of wastes is necessary. The source, final disposition, and location of the wastes, as well as methods undertaken to prevent future occurrences of such disposals shall also be reported. Those wastes which cannot be safely recovered shall be reported to the Board in writing within seven days of the discharge. If no removal of wastes occurred during the reporting period the report shall so state.

6. Wastes deposited at this site shall be contained, and shall not be permitted to migrate off the site.

7. All wastes shall be adequately covered at the end of each operating day in accordance with Subsection 2544 of Chapter 15. Interim cover is daily cover and intermediate cover as defined by the California Integrated Waste Management Board. Interim cover over wastes discharged to this landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with material deposited. To this end, ponding of liquids over deposited wastes is prohibited. Other measures shall be taken as needed, to prevent a condition of nuisance from fly breeding, rodent harborage, and other vectors.

8. The migration of gases from the disposal site shall be controlled as necessary to prevent water pollution, nuisance, or health hazards.

9. Gas condensate gathered from the gas monitoring and collection system at this disposal site shall not be returned to the site. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing, and treatment or disposal by approved methods of all gas condensate produced at the disposal site.

10. A Leachate Collection and Removal System (LCRS) will be installed at this site. The discharger shall intercept, remove, and dispose any liquid detected in the LCRS to a legal point of disposal.

11. In any area within the disposal site where seepage water is observed, provisions shall be made and/or facilities shall be provided to insure that seep water will not come in contact with decomposable refuse in this waste management unit. The location of all springs and seeps found during, prior to, or after placement of waste material that could affect this waste management unit shall be reported to the Board.

12. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the site in compliance with Section 2546 of Chapter 15. Temporary structures shall be installed as needed to comply with this requirement.

13. The waste management area shall be graded and maintained to promote proper runoff of precipitation and to prevent ponding of water. Erosion or washout of refuse or cover materials shall be prevented.

14. No polluted surface waters shall leave this site except as permitted by a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the Federal Clean Water Act and the CWC.

15. Any abandoned water wells or bore holes under the control of the discharger must be located and properly modified or sealed to prevent mixing of any waters between adjacent water bearing zones. A notice of intent to decommission a water well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other applicable agencies.

16. As a safeguard against structural deficiencies including faults, after the final excavation of any area has been completed and before construction of any containment feature or ground water barrier such areas shall be inspected and approved by Regional Board staff. A geologic map showing structural features and lithologies of the excavated area shall be prepared by a qualified geologist. Any significant geologic features encountered during ongoing excavation activities should also be noted. Such map shall be included with the final "as-built" report for the excavated area.

17. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment by telephone within 24 hours and in writing within seven days. The written notification shall fully describe the incident, including time of occurrence and duration of the incident, a description of the type of, time of, and duration of corrective measures, when correction will be complete (if the endangerment is continual), and the steps taken or planned to prevent recurrence.

E. Provisions for Water Quality Monitoring

1. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the CWC. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the CWC. Monitoring reports shall be submitted in accordance with the specifications contained in the Monitoring and Reporting Program prepared by the Executive Officer. This Monitoring and Reporting Program is subject to periodic revisions as warranted.

2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site, and during the closure and post-closure maintenance periods. If any of these wells and/or monitoring devices is damaged, destroyed or abandoned for any reason, the discharger shall provide a substitute to meet the monitoring requirements of this Order.

3. The discharger shall ensure that all the monitoring wells and/or lysimeters are in proper operating order at all times. The discharger shall have a Monitoring Well Preventative Maintenance Program approved by the Executive Officer. Elements of the Program are to include a minimum of periodic visual inspections of the well integrity, pump removal and inspection, etc., plus appropriate inspection frequencies. If a well or lysimeter is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within seven days after such discovery, and this notification shall contain a time schedule for returning the well or lysimeter to operating order. The initial Monitoring Well Preventative Maintenance Program will be due to the Board within 60 days after the adoption of this Order. Changes to the Program should be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

4. Additional monitoring is required in Canyon C as the downgradient well cannot be completed until construction in this area is completed. For this well and all other monitoring wells or lysimeters installed in the future, the discharger shall submit a technical report for approval by the Executive Officer, prior to installation. The technical report shall be submitted at least 90 days prior to the anticipated date of installation of the wells or lysimeters. The report shall include:

a. Maps and cross sections showing the locations of the monitoring facilities; and,

b. Drawings and data showing the following design details of the monitoring facilities. These data shall include:

(i) casing and bore hole diameters;
(ii) casing materials (PVC, stainless steel, etc.);
(iii) depth of each hole;
(iv) size and position of perforations;
(v) method of joining the sections of the casing;
(vi) nature of filter material;
(vii) depth and composition of seals; and,
(viii) method and length of time of well development.

If a well or lysimeter is proposed to replace an inoperative well or lysimeter identified in the Well Preventative Maintenance Program, the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report should be submitted with the required time schedule.

5. The discharger shall provide for the proper handling and disposal of water purged from the wells during sampling. Water pumped from a well shall not be returned to that well (or any other), unless appropriate waste discharge requirements have been prescribed, nor shall it be used for dust control or irrigation without waste discharge requirements.

6. Within 60 days of adoption of this Order, the discharger shall submit for review and Executive Officer approval, a workplan to develop and evaluate background water quality in the vicinity of the landfill. The workplan shall contain design specifications, proposed locations, and supporting rationale for monitoring wells and lysimeters, in accordance with Item E-4, above. The proposed monitoring wells will be used to obtain ground water samples representative of quality equivalent to conditions anticipated to be naturally occurring at the upgradient boundaries of the landfill.

F. Provisions for Containment Structures

1. The site shall have containment structures which are capable of preventing degradation of the waters of the State. Construction standards for containment structures shall comply with Article 4 of Chapter 15. Any exceptions to these standards must fully meet the standards in Section 2510(b-c). Any deviation from these design specifications is subject to the Executive Officer's review and approval prior to any construction.

2. The discharger shall submit detailed preliminary plans, specifications, and descriptions for all future containment structures and monitoring systems (for which they have not already done so) for Executive Officer approval within 60 days after the adoption of this Order. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. No disposal shall occur in a new area until the corresponding construction is completed and certified. The discharger shall also submit detailed as-built plans, specifications and descriptions for all future containment structures and monitoring systems within 30 days after completion of construction. If the preliminary and as-built plans and specifications are virtually identical, only change sheets need be submitted in lieu of complete as-built plans. The discharger shall also submit a program, to be implemented upon request by the Executive Officer, which will provide for testing of any leachate collection system to demonstrate its operating efficiency during the operating life of the facility, and during the closure and post-closure maintenance periods.

3. A legal description of the property boundaries of the disposal site shall be provided and permanent survey monuments shall be installed and maintained. The discharger shall also provide a scaled drawing of the site showing the current elevations of the disposal areas, permanent monuments, structures, and other significant features, and their locations relative to the site boundaries within 60 days of adoption of this Order.

4. Bench marks shall be established and maintained at the site in sufficient number to enable reference to key elevations and to permit control of critical grading and compaction operations.

G. Provisions for Reporting Scheduled Activities

1. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The City of Los Angeles shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

2. The Regional Board shall be notified in writing within seven days if fluid is detected in a previously dry LCRS or if a progressive increase in the liquid volume is detected in an LCRS.

3. The discharger shall notify the Regional Board of changes in information submitted in the ROWD and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or site operations and features. The discharger shall notify the Regional Board at least 120 days before any material change is made.

4. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure or post-closure maintenance of this facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements, approved closure plans, and any revisions thereof.

5. The discharger shall comply with the closure notification requirements contained in Section 2590(c)(5) of Chapter 15. As noted in that Section, closure must be in accordance with an approved closure plan.

6. The discharger shall submit final closure and post-closure maintenance plans to the Board at least 240 days prior to closure (unless this requirement is less stringent than laws or regulations adopted regarding Closure and Post Closure Plans adopted for other regulatory agencies.).

7. The discharger shall submit a plan to be approved by the Executive Officer, within 60 days after adoption of this Order, demonstrating compliance with Section 2580(f) of Chapter 15, which requires that the discharger provide for funding to insure that closure and post-closure maintenance activities are properly performed (unless this requirement is less stringent than laws or regulations adopted regarding closure and post-closure plans adopted for other regulatory agencies).

8. The discharger shall notify the Regional Board in writing at least 180 days prior to the beginning of final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with applicable federal and state regulations. In the event closure and post-closure maintenance plans have not been submitted for this disposal site, they shall accompany this notice.

9. The discharger shall notify the Regional Board within 30 days after the completion of final closure activities that closure has been completed. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with applicable regulations. The discharger shall certify that all closed waste management units shall be maintained in accordance with approved post-closure maintenance plan(s).

H. General Provisions

1. The discharger shall comply with all applicable provisions, requirements, and procedures contained in the most recent revision of the California Code of Regulations, Title 23, Chapter 3, Chapter 15, "Discharges of Waste to Land," and any amendments thereto.

2. Regional Board staff shall be allowed entry to the landfill, and to any location where records are kept regarding the landfill, at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with this Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor operations to assure compliance with this Order, or as authorized by applicable laws or regulations.

3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

4. This Board considers the property owner(s) to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal areas or by infiltration of water applied to this property during subsequent use of the land for other purposes.

5. These requirements do not exempt the discharger of this waste disposal site from compliance with any other current or future law which may be applicable. These requirements are not a permit; they do not legalize this waste disposal site, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes.

6. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from their liabilities under federal, state, or local laws.

7. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirement of this Order.

8. This Order does not convey any property rights of any sort, or any exclusive privilege.

9. The discharger must comply with all of the terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the CWC, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.

10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

a. Violation of any term or condition contained in this Order;

b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.

11. Resolution No. 70-05, adopted by this Board on January 14, 1970, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on December 2, 1991.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 5636
FOR
CITY OF LOS ANGELES
(Lopez Canyon Landfill)

(File No. 69-68)

I. REPORTING

A. The discharger shall implement this Monitoring and Reporting Program beginning 60 days after the adoption of Order 91-122. Waste disposal monitoring reports shall be submitted to the Board monthly, by the first day of the second following month. Water quality monitoring reports shall be submitted to the Board quarterly, by the first day of the third following month. The first waste disposal monitoring report under this program is due April 1, 1992, and the first water quality monitoring report under this program is due May 1, 1992. Subsequent to receipt of any reports required by Water Quality Monitoring item D-4 of Order No. 91-122, this Monitoring and Reporting Program shall be revised accordingly.

B. The discharger shall submit all monitoring data in hard copy form and also monitoring data on computer diskette (5-1/4 inch, 360 kilobyte, or 3-1/2 inch, 1.44 megabyte). The monitoring data submitted on diskette should be in ASCII format, and presented in a cumulative, updated form with each submittal. Monitoring data submitted in hard copy form should be in discrete, noncumulative form.

C. Each monitoring report must affirm that all analyses were conducted at a laboratory certified for such analyses in accordance with Section 13176 of the California Water Code and in accordance with current EPA guideline procedures contained in 40 CFR Part 136, or as specified in this Monitoring Program.

D. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

E. The discharger may submit additional data to the Board not required by this Program in order to simplify reporting to other regulatory agencies.

F. Quarterly monitoring shall be performed during the months of March, June, September, and December. Annual monitoring shall be performed during the month of December. See Section IIIA(4) for additional requirements for quarterly monitoring. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.

G. Where the units for a parameter are listed as ug/l (ppb), suitable analytical techniques shall be used to achieve this precision. All method detection limits shall be below the current Maximum Contaminant Levels listed in Title 22 of the California Code of Regulations or Action Levels Recommended by the Department of Health Services, Sanitary Engineering Branch, or (for organics) the minimum limit of detection specified in EPA Methods or Appendix A, 40 CFR 136 if the Maximum Contaminant Level or Action Level is not achievable.

H. Analytical data reported as "less than" shall be reported as less than a numeric value or below the limit of detection for that particular analytical method (also give the limit of detection).

I. All analytical samples obtained for this Program shall be grab samples.

J. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

K. After approval of the required waste load checking program, results of that checking program shall be reported in each monitoring report. In the event that hazardous wastes or other unacceptable materials are detected, the type, source, and disposition of those wastes shall also be reported.

L. The City of Los Angeles shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation, and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time and shall be extended during the course of any unresolved litigation regarding all or any part of the entire site.

M. Records of monitoring information shall include:

a. The date, exact place, procedure and time of sampling or measurement;
b. The individual(s) who performed the sampling or measurement;
c. The date(s) analyses were performed on the samples;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of the analyses or measurements.

IL WASTE DISPOSAL REPORTING

A. The first report to the Board shall include a map of the site and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated monthly and summarized and submitted with the annual report due March 1. If a new area is started, it shall be updated with the corresponding monthly report.

B. A waste disposal report containing the following information shall be filed with this Board each month:

1. A tabular list of the estimated average monthly quantities (in cubic yards and tons) and types of materials deposited each month. If no wastes were deposited during the month, the report shall so state.

2. An estimate of the remaining capacity (in cubic yards and tons) and the remaining life of the site in years and months.

3. A certification that all wastes were deposited in compliance with the Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management area(s) as specified in the Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control etc., during the month.

C. In the event that dewatered sewage or water treatment sludge, is permitted at the site, such disposal shall be subject to monitoring and reporting requirements which shall be developed prior to the disposal of this waste.

D. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition.

The following details shall be included:

1. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

2. Identification (if known) and the amount of waste.

3. The name and address of the hauler (who removes the waste from this site), if different from the source.

4. The ultimate point of disposal for the waste.

5. The City of Los Angeles' actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable).

If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. GROUND WATER MONITORING

A. Provisions and General Requirements

1. For the purposes of this Program, the terms "Monitoring Well" and "Lysimeter" are synonymous.

2. The ground water monitoring program must be carried out during the active life of this site, during the closure and post-closure care periods, and during periods when no wastes are deposited at the site.

3. Analytical results for ground water monitoring shall be submitted with the corresponding monthly waste disposal report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well, a statement to that effect shall be submitted.

4. Monthly observations and measurements of the static water levels shall be made on all monitoring wells, and records of such observations and measurements shall be submitted with the monthly reports. All monitoring wells shall be sounded each December to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible. In the event that ground water is encountered in a normally dry well, samples shall be collected at that time for analysis.

5. Duplicate samples shall be taken for all metals analyses. Unfiltered samples shall be tested for total metals, and filtered samples (using filters with openings not less than 0.45 microns) shall be tested for dissolved metals. Both samples are preserved with nitric acid, the filtered sample preserved immediately after it has been filtered.

6. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method which minimizes volatilization and degradation of potential constituents.

7. The velocity and direction of ground water flow under the waste management unit shall be determined quarterly for the first year and every third quarter thereafter. ("Third" means nine months later, not the third quarter of the year).

B. Monitoring Well Locations

1. Representative ground water samples shall be obtained, if water is present, on a quarterly basis, and the analytical results reported, from at least the following monitoring wells:

MW88-1, MW88-2, MW88-3, MW88-4, MW88-5, LYS88-1, LYS88-2.

2. The precise locations, depths, well screen lengths, and other design criteria for new monitoring wells shall be submitted to the Executive Officer for approval.

C. Sampling and Analyses

1. The following are the indicator parameters for this facility: Electrical conductivity, chloride, sulfate, pH, total organic halogen, BOD, and COD.

2. Routine quarterly sampling and analyses shall consist of the following parameters:

Parameters	Units
pH[1]	pH units
Electrical conductivity	umhos/cm
BOD_5 20°C	mg/l
COD	mg/l
Total dissolved solids	mg/l
Boron	mg/l
Alkalinity[1]	mg/l
Ammonia (as N)	mg/l
Bicarbonate (HCO_3)	mg/l
Calcium	mg/l
Chloride	mg/l
Iron (total and dissolved)	mg/l
Total Hardness (as $CaCO_3$)	mg/l
CO_2[1]	mg/l
Sulfate	mg/l
Sodium	mg/l
Potassium	mg/l
Nitrate (as N)	mg/l
Total organic carbon	mg/l
Total organic halogens	ug/l
Benzene	ug/l
Carbon tetrachloride	ug/l
Methylene Chloride	ug/l
1,1-Dichloroethane	ug/l
1,2-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2-Dichloroethene	ug/l
Trichloroethylene	ug/l
Perchloroethylene	ug/l
Vinyl chloride	ug/l

[1] Although field determination is the preferred procedure for pH in the presence of dissolved carbon dioxide, pH may be determined in the laboratory if the total elapsed time between sampling and testing is less than 6 hours and the sample is properly sealed during transit. Each report shall certify that these conditions were met if laboratory determination of these parameters was done in lieu of field determination.

3. The following shall be sampled quarterly for the first year that this program is in effect and yearly thereafter (during the month of December), provided further quarterly sampling is not warranted by the presence of appreciable contamination:

a. Volatiles, semi-volatiles, pesticides and PCBs using EPA Methods 624, 625, and 8080. If Method 624 cannot satisfy Item I-H of this program, then EPA Methods 601 and 602 shall be substituted for Method 624. All peaks greater than 10% of the internal standard should be identified and quantified for gas chromatography analyses. After the first year of monitoring, Method 8080 will be discontinued unless warranted by the presence of appreciable contamination.

b. The following metals: antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, and zinc. Total cyanide and sulfides shall also be determined.

c. Acrolein and acrylonitrile (using EPA Method 603 or 8030), if EPA Method 601 or 624 does not quantitatively determine their presence. After the first year of monitoring, quantification of acrolein and acrylonitrile may be discontinued unless warranted by the presence of appreciable contamination.

IV. SURFACE WATER MONITORING

A. Provisions and General Requirements

1. The surface water monitoring program must be carried out during the active life of this waste management area, during the closure and post closure care periods, and during periods when no wastes are deposited at the site, unless, at some future time, the City of Los Angeles installs drainage controls which prevent all of the runoff from the waste management units from entering the surface and ground waters of the State. If such drainage controls are installed, the surface water program will be discontinued.

2. Analytical results for surface water monitoring shall be submitted with the corresponding monthly waste disposal report. If a surface water monitoring location was not sampled during a reporting period, the reason for not obtaining a sample shall be given (no rain, already obtained one for fall, etc.).

3. All metals analyses shall be unfiltered for total metals concentrations. If you choose to also have dissolved metals concentrations determined, you may do so, provided the determination is made on filtered samples (using filters with openings not less than 0.45 microns). Both samples are preserved with nitric acid, the filtered sample preserved immediately after it has been filtered.

B. Sample Locations

1. Representative surface water samples shall be obtained semiannually, once during the rainy months (Fall) and once during the second half of the rainy months (Spring), from at least the following locations.

Canyon A basin outlet, Canyon B basin outlet, Canyon C basin outlet, Sub-drain C pipe outlet.

C. Sampling and Analyses

1. The following are the indicator parameters for this facility: Electrical conductivity, chloride, sulfate, pH, total organic halogens, BOD, and COD.

2. Routine (semiannually) sampling and analyses shall consist of the following parameters:

Parameters	Units
pH[1]	pH units
Electrical conductivity	umhos/cm
BOD_5 20°C	mg/l
COD	mg/l
Oil & Grease	mg/l
Total dissolved solids	mg/l
Boron	mg/l
Alkalinity[1]	mg/l
Ammonia (as N)	mg/l
Bicarbonate (HCO_3)	mg/l
Calcium	mg/l
Chloride	mg/l
Iron	mg/l
Total hardness (as $CaCO_3$)	mg/l
CO_2[1]	mg/l
Sulfate	mg/l
Sodium	mg/l
Potassium	mg/l
Nitrate (as N)	mg/l
Total organic carbon	mg/l
Total organic halogens	ug/l
Acetone	ug/l
Benzene	ug/l
Carbon tetrachloride	ug/l
Methylene Chloride	ug/l
1,1-Dichloroethane	ug/l
1,2-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2-Dichloroethene	ug/l

Trichloroethylene	ug/l
Perchloroethylene	ug/l
Vinyl chloride	ug/l

[1] Although field determination is the preferred procedure for pH in the presence of dissolved carbon dioxide, pH may be determined in the laboratory if the total elapsed time between sampling and testing is less than 6 hours and the sample is properly sealed during transit. Each report shall certify that these conditions were met if laboratory determination of these parameters was done in lieu of field determination. .

3. The following shall be sampled semiannually for the first year that this program is in effect and yearly thereafter (during the first storm of the rainy season), provided further semiannually sampling is not warranted by the presence of appreciable contamination:

a. Volatiles and semi-volatiles using EPA Methods 624 and 625. If Method 624 cannot satisfy Item I-H of this program, then EPA Methods 601 and 602 shall be substituted for Method 624. All peaks greater than 10% of the internal standard should be identified and quantified for gas chromatography analyses.

b. The following metals: antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, and zinc. Total cyanide and sulfides shall also be determined.

4. Surface water monitoring will be continued as long as it is determined necessary by the Board.

V. GENERAL PROVISIONS

1. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

2. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

3. A grab sample is defined as an individual sample collected in fewer than 15 minutes.

4. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

5. By March 1 of each year, the discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

6. The discharger shall maintain all sampling and analytical, results, including strip charts; date, exact place, and time of sampling; date analyses were performed; analyst's name, analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge when requested by the Board.

7. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.

8. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or any other authorized employee.

9. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the foregoing is true and correct.

Executed on the _____ day of _____ at _____."

_____(Signature)

_____(Title)

10. If no waste was deposited during the reporting period, the report shall so state.

11. These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Board, Los Angeles Region. Records or reports which might disclose trade secrets, etc., may be excluded from this provision as provided in Section 13267(b) of the California Water Code, if requested.

Ordered By: Robert P. Ghirelli
ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: 12/5/91